

## **J.C. Pfahl, PLS Response to Redlines & Email comments by Matt Wilson, PLS**

The redlines and comments seem to fall into the following general categories. After each category, I have included my response and a description of how the issue was addressed in the revised Record of Survey (ROS).

### **1. Use of grid distances vs ground distances**

Grid distances and bearings were used in the original draft ROS. This was done as the contract between Amec Foster Wheeler (AmecFW) and the US Army Corps of Engineers (USACE) prescribed that the survey be performed utilizing the Bunker Hill Site Grid. The monument "SMLT" is the basis of the bunker grid as well as the survey I performed. I probably did not make that clear enough and should have referenced the station SMLT and the CAF on the draft ROS.

In the interest of a partnering effort between AmecFW and IDT, I was instructed to prepare the revised ROS by converting to ground distances using a CAF of 1.000160210 and eliminating all reference to GPS. I also eliminated all coordinates and am now treating the survey as a standard ground survey.

The discrepancy in the calculated line vs the measured line is now 1.05' in 13,273.40' for an accuracy of 1:12,641 (Idaho only requires 1:5000)

As can be seen, there is no change in the distances from monuments I set and the found monuments near them. As the distances are small, they did not change when subjected to the CAF and reported to 2 decimal places.

### **2. Method of proportioning the discrepancy in distance between the 2 found ITD monuments**

I proportioned the 1.05-foot shortfall over the entire 13273.40'. It is standard practice in land surveying to proportion a discrepancy equally between 2 found monuments. The result is 0.999921 ground foot = 1.000000 calculated foot.

This is not a survey of I-90, it is a survey of a property line along the south boundary of I-90 using the best available evidence – 2 found ITD monuments that very closely fit what is shown on the I-90 right of way plans. Proportioning the discrepancy between the 2 found monuments is standard land surveying practice.

Mr. Wilson suggests that one should simply make the discrepancy disappear by creating an equation at one of the monuments. I agree that this is what one would do if surveying the existing centerline of I-90 but this is not an acceptable land surveying practice when determining a property line

### **3. Use of other found monuments**

Mr. Wilson asked whether any other monuments were searched for on the north side of I-90. The answer is yes. A thorough search was made for other monuments around the Bunker Ave exit on both sides of I-90 that are shown on Ken Preston's (Kellogg City Engineer in the early 1970's) maps of Kellogg. The GPS was used to take the field crew to the calculated location and a pin finder was used to see if a monument could be found. None could be found, they are either buried deep or destroyed.

There are several monuments on the north side of I-90 at the Smelterville exit. These monuments are for the airport road row not the I-90 row. Most of the row along the north side falls in the river or river channel and the field crew was unable to locate any other ITD monuments. There are rebar monuments I have previously set that will be slightly off the row line if put into this survey as this survey has a much better basis of bearing (a very long line between 2 found ITD monuments).

In addition, the position of another ITD monument was collected on the south side of I-90 near the Smelterville exit. This monument is located at station 1339+15 and is not on the row line or shown on the I-90 plans. I checked how it fit vs the 2 mons I utilized. Instead of being 1.05 feet short in 13,273.40' it is 1.24 feet short in 9,539.26'. This would have required a greater adjustment and the monument was discounted and not shown on the ROS as there is no reference to it or its distance from the I-90 centerline.

### **4. Verification of right of way widths**

I utilized the publicly available right of way plans for I-90, that were prepared by ITD prior to constructing I-90, to determine the right of way widths. I do not have copies of the deeds from the various private parties to ITD. The requirement that "Right of Way widths be verified by deeds of record" is an ITD requirement, it is not an Idaho Code requirement, is not common practice by other land surveyors, and is not a requirement in my contract with AmecFW/USACE. Although it was not a requirement of my contract, prior to preparing the draft ROS I reviewed a couple of deeds I had in my possession to ensure that the ITD row plans were consistent with the deeds.

## **5. Idaho Code requirements for Records of Survey**

Mr. Wilson references the following Idaho Code Sections:

IC 55-1906(1) – This section refers to describing found monuments. In the draft ROS, I said “See CP&FR for details”. The recorded corner perpetuation and filing record, CP&FR (instrument # is shown), has a detailed description of each monument and any accessories that may be present. It is my belief that referencing the CP&FR meets the intent of this Idaho Code section. To address this comment, I added a description of the found monuments to the revised ROS.

IC 55-1907 – This section refers to the use of state plane coordinates. In the draft ROS, additional information on the monument SMLT should have been shown. This is no longer an issue as the revised ROS is now a standard ground survey with no coordinates or reference to GPS shown.

IDPA 10 Title 1 – I believe Mr. Wilson is referring to Chapter 2, Rules of Professional Responsibility, Rule 005 (04), “Obligation to Communicate Discovery of Discrepancy”. This rule requires that if a registrant discovers a material discrepancy which may impact the health, property or welfare of the public, the discoverer shall make a reasonable effort to inform the other registrant in writing. In this case, it is debatable whether the small discrepancies between this survey and the surveys performed by Scott Rasor are material. To address this comment, I will send a copy of the revised ROS to Scott once it is finalized and recorded.

## **6. The Section line between Sections 35 and 36**

Mr. Wilson suggests that the  $\frac{1}{4}$  corner to the north should be tied and a bearing and distance shown. This tie is shown on Scott Rasor’s ROS’s recorded as Instrument #387265 and #408942. Scott placed a monument where the section line, as currently monumented, intersects the I-90 row that he calculated. The point monumented by Scott point has no bearing on this survey. I have monumented the row at the point shown on the right of way plans at station 1369+83.55 where a direct tie to the I-90 centerline is shown.

## **7. Drafting issues (line types, symbols, text size, etc.)**

Mr. Wilson requested different line types, symbols and text sizes than what I provided. For clarity, I increased some of the font sizes and changed some line types. It does not appear that these changes have a material impact on the content of the ROS.

In addition, I added three scaled up details to clarify the position of found monuments.

**8. Approval/Acceptance of Survey by ITD**

This survey was performed for AmecFW/USACE under the prescriptive scope and requirements of their contract. Under that contract, approval by both ITD and IDEQ is required prior to recording of this survey. The revised ROS was prepared under a teamwork/partnering oriented goal to address ITD's concerns.

Under Idaho Code 55-1904, I am required to record a survey within 90 days of completion of the survey. I completed this survey in April, submitted it to ITD, and have been unable to record it due to ITD's lack of approval.

